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SHORT REPORT

Asymptomatic Venous Aneurysm in the Popliteal Fossa: a Case Report

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Introduction

Venous aneurysms are rare; most reports involving peripheral veins have described them arising from the popliteal vein. We present a case of an asymptomatic venous aneurysm in the popliteal fossa.

duplex scan showed no flow in the aneurysm with normal flow in the popliteal vein. Repeat duplex examination at 6 months revealed the aneurysm to have reduced in size.

Case Report

A 43-year-old male road construction worker presented to accident and emergency complaining of a swelling behind his left knee. He was a non-smoker. He had a 2-year history of mild chronic renal impairment (creatinine 140) and hypertension. Initial examination of his knee revealed no abnormality but a lateral radiograph of the knee showed a circular soft tissue shadow in the popliteal fossa. Subsequent examination with the patient standing revealed a soft mass in the popliteal fossa that disappeared on lying horizontal. Venography showed a venous aneurysm separate from the popliteal vein displacing it anteriorly (Fig. 1). A subsequent CT scan demonstrated an afferent connection to the deep calf veins (Fig. 2). The patient was anticoagulated with warfarin because of the risk of pulmonary embolism.

When the patient was reviewed 2 weeks later, examination suggested a thrombosed aneurysm. A further



Fig. 1. Venogram of the left lower limb, showing a venous aneurysm in the popliteal fossa that displaces the popliteal vein.

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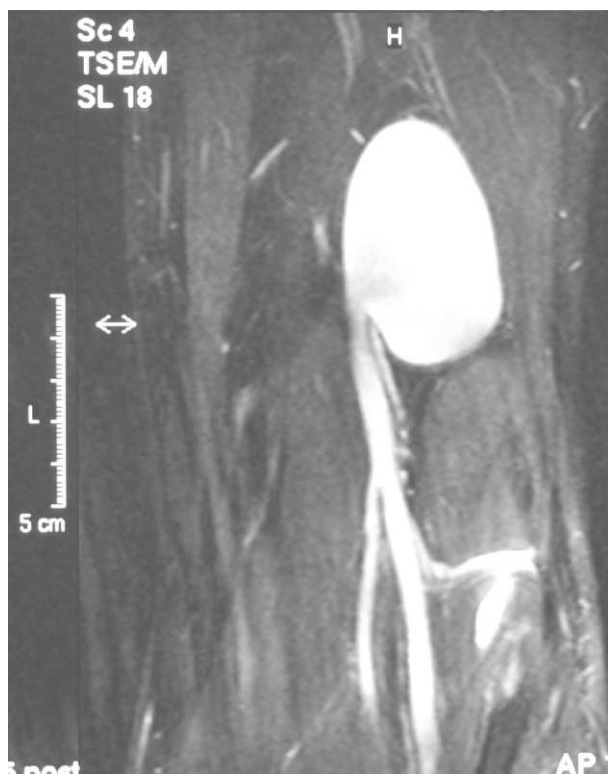


Fig. 2. CT scan with intravenous contrast, showing a venous aneurysm in the popliteal fossa connected to afferent veins in the calf. No proximal efferent connection is seen.

Discussion

True aneurysms of the popliteal vein have been described in about 100 cases in the world literature. The first in 1976 was discovered after venography of the lower limbs in a patient presenting with pulmonary emboli.¹ Subsequent reports have described most

cases presenting with pulmonary emboli. This is presumably caused by clot formed in the aneurysmal sac. In such cases, effective surgical management has been excision of the aneurysm and reconstruction with an inter-position vein graft.² Asymptomatic aneurysms of the popliteal vein were found in 0.18% of patients attending a vascular laboratory with symptomatic venous disease.² Unlike other aneurysms the majority have been described as saccular.³ The incidence in the general population with normal peripheral venous drainage is not known.

Without surgical exploration it is difficult to prove the aetiology of this patients venous aneurysm. It thrombosed asymptotically without affecting the popliteal vein despite full anticoagulation. This may reflect that this was a saccular aneurysm. Perhaps it was enlarging such that the flow in the aneurysm sac became more sluggish leading to thrombosis. Also being saccular and being almost adjacent to rather than a generalised dilation of the popliteal vein, the thrombosis did not propagate into the vein lumen itself. What has not been discerned from the literature to date is whether or not saccular or fusiform aneurysms (arterial or venous) are more likely to cause emboli.

References

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